

1. ~~A block-based video coding method comprising the steps of:~~

B2
a) selecting one of DC values of a left block (B3) and an upper block (B2) of a target block (B) based on comparison result of a first value and a second value, the first value being a difference between DC values of a left upper block (B1) and the left block (B3), the second value being a difference between DC values of the left upper block (B1) and the upper block (B2); and

sub D1
b) predicting the selected DC value as a DC value of the target block (B), thereby generating a predictive DC value of the target value.

REMARKS

The Examiner has rejected claims 1-2 under 35 U.S.C. § 102(e) as being anticipated by Haskell, et al., U.S. Patent No. 6,005,622. Applicants have cancelled claim 2.

In response to the rejection of claim 1, Applicants state the following:

To reject a claim for “anticipation,” the Examiner is required to establish “identity of invention.” *Glaverbel Societe Anonyme v. Northlake Mktg. & Supply*, 33 USPQ2d 1496, 1498 (Fed. Cir. 1995). *Each and every element* recited in a claim must be found in a single prior art reference and arranged as in the claim. *In re Marshall*, 198 USPQ 344, 346 (CCPA 1978); *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). *There must be no differences* between what is claimed and what is disclosed in the applied reference. *In re Kalm*, 154 USPQ 10, 12 (CCPA 1967); *Scripps v. Genentech Inc.*, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). “Moreover, it is incumbent upon the Examiner to *identify wherein each and every facet* of the claimed invention is disclosed in the applied

reference.” *Ex parte Levy*, 17 USPQ2d 1461, 1462 (BPAI 1990). And the Examiner is required to point to the disclosure in the reference “*by page and line*” upon which the claim allegedly reads. *Chiong v. Roland*, 17 USPQ2d 1541, 1543 (BPAI 1990).

Haskell teaches a predictive video coder, as can be seen in Fig. 5, according to determination result whether the vertical gradient is larger than horizontal gradient, the encoder calculates DC residual of the difference between DC values of the left block and the target block ~~(DC_A - DC_B)~~ or the difference between DC values between the upper block and the target block ~~(DC_A - DC_B)~~ and transmits encoded residual or encoded coefficients in accordance with the possibility of conservation of the bandwidth.

Haskell fails, however, to teach that the encoder selects one of DC values of (using Applicant’s claim parlance) the left block (B3) and the upper block (B2), and assigns the selected DC value as a DC value of the target block (B). Therefore, Haskell fails to disclose each element and limitation of the instant claims, as amended.

Entry and approval of the amendments and withdrawal of the rejection is solicited.

In view of the foregoing, favorable action on the merits, and allowance of all claims, respectfully is solicited.

Respectfully submitted,

By: 

Charles T. J. Weigell

Reg. No. 43,398

BRYAN CAVE LLP

245 Park Avenue

New York, NY 10167

Tel. No.: (212) 692-1898

Fax No.: (212) 692-1900

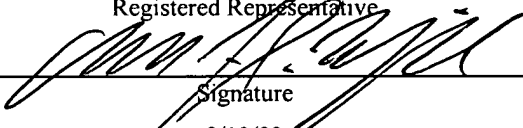
I hereby certify that this correspondence is being deposited with sufficient postage to the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on September 13, 2002
(Date of Deposit)
Charles T. J. Weigell
Name of applicant, assignee, or Registered Representative

Signature
9/13/02
Date of Signature

EXHIBIT 1

“MARKED UP” AMENDMENTS TO CLAIMS PURSUANT TO RULE 1.121(c)

1. (Amended) A block based video coding method comprising the steps of:
[selecting coded predictive DC coefficients depending on a difference between quantized coded DC gradients which are coefficients of a plurality of neighboring blocks B1, B2 and B3, of a block B to be coded; whereby the respective DC coefficients remains substantially unchanged during said coding method.]

a) selecting one of DC values of a left block (B3) and a upper block (B2) of a target block (B) based on comparison result of a first value and a second value, the first value being a difference between DC values of a left upper block (B1) and the left block (B3), the second value being a difference between DC values of the left upper block (B1) and the upper block (B2); and

b) predicting the selected DC value as a DC value of the target block (B), thereby generating a predictive DC value of the target value.

[2. The block based video coding method according to claim 1, wherein the DC coefficient of the block (B) is selected by the difference between the coded DC gradients of at least two neighboring blocks of the block (b) to be coded.]

30. (New) The method as recited in claim 1, wherein said step a) includes the steps of:

a1) obtaining a first value which is a difference between DC values of the upper left block (DC_B1) and the upper block (DC_B2);

a2) obtaining a second value which is a difference between DC values of the upper left block (DC_B1) and the left block (DC_B3);

a3) comparing the first value with the second value;

a4) selecting the DC value (DC_B2) of the upper block if the first value is larger than the second value; and

a5) selecting the DC value (DC_B3) of the left block if the first value is smaller than the second value.

31. (New) The method as recited in claim 1, wherein the first value and the second value are absolute values.

32. (New) The method as recited in claim 1, further comprising the step of:

c) performing DPCM coding on the predictive DC value and the DC value of the target block, thereby generating video information; and

d) transmitting the video information to a decoder.

33. (New) A block based video coding method, comprising the steps of:

a) selecting one of DC values of a left block (B3) and a upper block (B2) of a target block (B) based on comparison result of a first value and a second value, the first value being a difference between DC values of a left upper block (B1) and the left block (B3), the second value being a difference between DC values of the left upper block (B1) and the upper block (B2); and

b) assigning the selected DC value as a DC value of the target block (B), thereby generating a predictive DC value of the target value.

34. (New) The method as recited in claim 33, wherein said step a) includes the steps of:

a1) obtaining a first value which is a difference between DC values of the upper left block (DC_B1) and the upper block (DC_B2);

a2) obtaining a second value which is a difference between DC values of the upper left block (DC_B1) and the left block (DC_B3);

a3) comparing the first value with the second value;

a4) selecting the DC value (DC_B2) of the upper block if the first value is larger than the second value; and

a5) selecting the DC value (DC_B3) of the left block if the first value is smaller than the second value.

35. (New) The method as recited in claim 33, wherein the first value and the second value are absolute values.

36. (New) The method as recited in claim 33, further comprising the step of:

c) performing DPCM coding on the predictive DC value and the DC value of the target block, thereby generating video information; and

d) transmitting the video information to a decoder.

37. (New) A block based video coding apparatus, comprising:

selection means for selecting one of DC values of a left block (B3) and a upper block (B2) of a target block (B) based on comparison result of a first value and a second value, the first value being a difference between DC values of a left upper block (B1) and the left block (B3), the second value being a difference between DC values of the left upper block (B1) and the upper block (B2); and

prediction means for predicting the selected DC value as a DC value of the target block (B), thereby generating a predictive DC value of the target value.

38. (New) The apparatus as recited in claim 37, wherein said selection means includes:

means for obtaining a first value which is a difference between DC values of the upper left block (DC_B1) and the upper block (DC_B2);

means for obtaining a second value which is a difference between DC values of the upper left block (DC_B1) and the left block (DC_B3);

means for comparing the first value with the second value;

means for selecting the DC value (DC_B2) of the upper block if the first value is larger than the second value; and

means for selecting the DC value (DC_B3) of the left block if the first value is smaller than the second value.

39. (New) The apparatus as recited in claim 37, wherein the first value and the second value are absolute values.

40. (New) The apparatus as recited in claim 37, further comprising:

DPCM coding means for performing DPCM coding on the predictive DC value and the DC value of the target block, thereby generating video information and for transmitting the video information to a decoder.

41. (New) Data stream for use in block based video coding, the data stream transmitted to a decoder, comprising:

video information generated by performing DPCM coding on a predictive DC value and a DC value of the target block, wherein the predictive DC value is generating by the steps of:

a) selecting one of DC values of a left block (B3) and a upper block (B2) of a target block (B) based on comparison result of a first value and a second value, the first value being a difference between DC values of a left upper block (B1) and the left block (B3), the

second value being a difference between DC values of the left upper block (B1) and the upper block (B2); and

b) predicting the selected DC value as a DC value of the target block (B).

42. (New) The data stream as recited in claim 41, wherein said step a) includes the steps of:

a1) obtaining a first value which is a difference between DC values of the upper left block (DC_B1) and the upper block (DC_B2);

a2) obtaining a second value which is a difference between DC values of the upper left block (DC_B1) and the left block (DC_B3);

a3) comparing the first value with the second value;

a4) selecting the DC value (DC_B2) of the upper block if the first value is larger than the second value; and

a5) selecting the DC value (DC_B3) of the left block if the first value is smaller than the second value.

43. (New) The data stream as recited in claim 41, wherein the first value and the second value are absolute values.